

CATALOG #: _____

TYPE: _____

PROJECT: _____

FEATURES

- Designed to meet the demanding requirements of controlled environments
- Specify green circuit to enhance visual clarity for the surgical team
- Seam-welded housing and door frame for infection-controlled environments
- Optimized lensing reduces shadowing and glare
- Multiple distribution options provide effective, application specific lighting performance
- Smooth surface doorframe and lens materials simplify cleaning and maintenance
- NSF approved closed cell foam gasketing seals the fixture for particle sensitive environments
- Designed to accommodate 2" tall T-bar
- Complies with MIL-STD-461G conducted emission regulations
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING** – 20-gauge die-formed, seam-welded C.R.S. Aluminum and stainless steel options available.
- DOOR FRAME** – One-piece 20-gauge seam-welded C.R.S. Hinged from one side with stainless steel safety cables. Attached to fixture using captive, stainless steel screws.
- SHIELDING** – Frosted Acrylic .125 thick Pattern #12 with clear acrylic underlay.
- FINISH** – 92% minimum average reflective white anti-microbial powder coating bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL** – High quality mid-power LED boards. Rated for 50,000 hours at 70% lumen maintenance (L70).
- MOUNTING** – NEMA Type "G" for 15/16", 1-1/2", and grid ceiling systems. NEMA Type "F" available.
- LISTINGS** –
 - CCSAUS certified as luminaire suitable for wet location under covered ceiling.
 - IP65 rated
 - ISO 5, Class 100 rated
 - NSF/ANSI 2
 - Complies with MIL-STD-461G with DIM or DRV drivers.
 - City of Chicago Environmental Air approved (not available when specified with NSWH).
- WARRANTY** – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: MSTG - 24 - L32/GRN/L121/840 - CS - SSYM - OPTIONS - DRV - UNV

ORDERING INFO

SERIES	CEILING TYPE	WIDTH	LENGTH	LUMENS ⁽¹⁾	CRI	CCT
MST	G NEMA Type "G"	1 1' ⁽³⁾	2 2' ⁽⁴⁾	1x4	8 80	30 3000K
	F NEMA Type "F" ⁽²⁾	2 2'	4 4'	L75	9 90 ⁽⁵⁾	35 3500K
				L37/GRN		40 4000K
				L36/GRN/L53		50 5000K
				2x2		
				L96		9,600lm white only
				L14/GRN/L57		1,400 green/5,700lm white
				L58/GRN		5,800lm green only
				2x4		
				L210		21,000lm white only
				L32/GRN/L121		3,200lm green/12,100lm white
				L114/GRN		11,400lm green only

HOUSING ⁽⁶⁾	DOOR FRAME ⁽⁷⁾	DISTRIBUTION
CS 20-gauge C.R.S.	S Flat white steel	SYM Symmetric
AL Flat white aluminum	F Flat white aluminum	SYM/ASY Symmetric/asymmetric ⁽⁸⁾

OPTIONS	CONTROL ⁽⁹⁾	VOLTAGE
EM/10W 10-watt emergency battery ⁽¹⁰⁾	DRV Non-dimming driver	120 120V
EM/10WLP Low-profile 10-watt emergency battery ⁽¹¹⁾	DIM Dimming driver	277 277V
GLR Fuse, fast blow (specify voltage), one per driver		UNV 120-277V
(L_) Additional lower lumen packages available. Example: 12,000 nominal lumens = MSTG-24-L210/840-(L120) ⁽¹²⁾		
EQCLIPS Earthquake clips ⁽¹³⁾		
TG Triple gasket ⁽¹⁴⁾		
NSWH Fixture provided without seam-welded housing ⁽¹⁵⁾		
TP Tamper resistant stainless steel, Torx T-25 screws ⁽¹⁶⁾		
2C Two circuit wiring ⁽¹⁷⁾		

ACCESSORIES

TPTX-25 TOOL Tamper-resistant tool for Torx T-25 screws. ⁽¹⁸⁾

NOTES

- Nominal lumen output based on 4000 CCT. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see options.
- See page 3 for NEMA TYPE "F" INSTALLATION.
- 4' length only.
- 2' width only.
- Extended lead times may apply. Consult factory for availability.
- Stainless steel options available, consult factory.
- Stainless steel options available, consult factory.
- Reduces fixture output up to 5%.
- See page 4 for ADDITIONAL CONTROL OPTIONS.
- 2x2, 2x4 only.
- 1x4 only.

- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- NEMA Type "G" only. 4 per fixture.
- See page 4 for GASKETING DETAILS.
- NSWH option does not affect NSF, ISO, IP65, or MIL-STD461G listings. Fixture is not City of Chicago Environmental Air approved when specified with NSWH.
- Requires a tamper-resistant tool, see Accessories.
- Inboard-outboard wiring. Allows for independent dimming of each circuit when ordered with DIM driver. Fixture is wired as two circuit by default when specified with green/white.
- Tamper-resistant tool must be ordered separately. Please specify quantity required per project.



FIXTURE PERFORMANCE DATA

LED PACKAGE	WATTAGE	SYMMETRIC						SYMMETRIC/ASYMMETRIC			
		DELIVERED LUMENS		EFFICACY (lm/W)		DELIVERED LUMENS		EFFICACY (lm/W)			
		WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN
WHITE											
1x4	L75	66.0	-	7509	-	113.8	-	7156	-	108.4	-
2x2	L96	79.6	-	9687	-	121.8	-	9377	-	117.9	-
2x4	L210	166.6	-	21154	-	126.9	-	20541	-	123.3	-
GREEN/WHITE											
1x4	L36/L53	38	40	5346	3572	140.7	89.3	5082	3395	133.7	84.9
2x2	L14/L57	48.3	17.5	5713	1444	118.3	82.8	5524	1269	114.3	72.7
2x4	L32/L121	93.8	36.7	12210	3250	130.1	88.6	11807	2883	125.8	78.6
GREEN											
1x4	L37	-	52.4	-	3766	-	71.9	-	3581	-	68.3
2x2	L58	-	79.0	-	5906	-	74.8	-	5717	-	72.4
2x4	L114	-	142.0	-	11466	-	80.8	-	11088	-	78.1

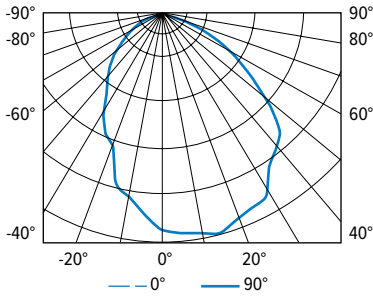
- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
- Results based on 4000K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

MULTIPLIER TABLES

	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	3000K	0.96
	3500K	0.97
	4000K	1.00
	5000K	1.03
90 CRI	3000K	0.79
	3500K	0.80
	4000K	0.83
	5000K	0.86

PHOTOMETRY

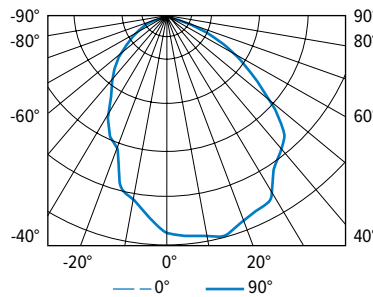
MSTG-24-L210/840-CS-SSYM/ASY-DIM-UNV Total Luminaire Output: 20541 lumens; 166.6 Watts | Efficacy: 123 lm/W | 80 CRI; 4000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	9333	9333	9333	9333	9333	9333
5	9490	9324	9041	8801	8671	860
15	9854	9546	8824	8044	7700	2414
25	9241	8736	7548	6216	5711	3447
35	8096	7518	6128	4632	4153	3888
45	7243	6599	5097	3509	3173	3872
55	4849	4410	3365	2263	2085	3050
65	2742	2537	1972	1328	1284	1946
75	1101	992	810	566	592	880
85	192	174	135	91	108	186
90	0	0	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	6721	33
	0 - 60	17530	85
	0 - 90	20541	100
	0 - 180	20541	100

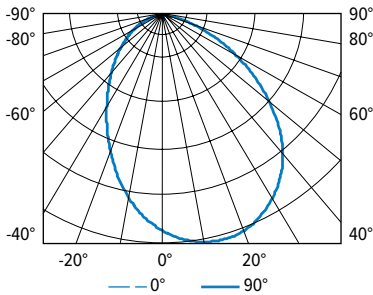
MSTG-24-L32/GRN/L121/840-CS-SSYM/ASY-DIM-UNV White Only Total Luminaire Output: 11807 lumens; 93.8 Watts | Efficacy: 126 lm/W | 80 CRI; 4000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	5365	5365	5365	5365	5365	5365
5	5455	5359	5196	5059	4984	495
15	5664	5487	5072	4624	4426	1387
25	5312	5022	4338	3573	3282	1981
35	4654	4321	3523	2662	2387	2235
45	4164	3793	2930	2017	1824	2226
55	2787	2535	1934	1301	1199	1753
65	1576	1458	1133	763	738	1118
75	633	570	465	325	340	506
85	110	100	77	53	62	107
90	0	0	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	3863	33
	0 - 60	10077	85
	0 - 90	11807	100
	0 - 180	11807	100

MSTG-24-L32/GRN/L121/840-CS-SSYM/ASY-DIM-UNV Green Only Total Luminaire Output: 2883 lumens; 36.7 Watts | Efficacy: 79 lm/W | 80 CRI; 4000K CCT



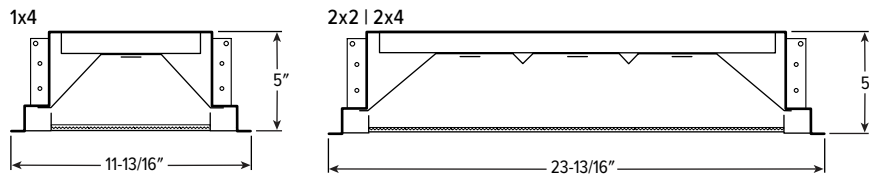
VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	1259	1259	1259	1259	1259	1259
5	1314	1293	1257	1204	1189	119
15	1361	1311	1198	1052	988	333
25	1317	1245	1080	853	759	485
35	1190	1108	917	655	557	554
45	978	893	714	475	398	532
55	686	624	497	323	272	429
65	391	358	295	196	170	280
75	158	143	126	91	81	128
85	21	18	18	14	12	23
90	0	0	0	1	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	937	33
	0 - 60	2452	85
	0 - 90	2883	100
	0 - 180	2883	100

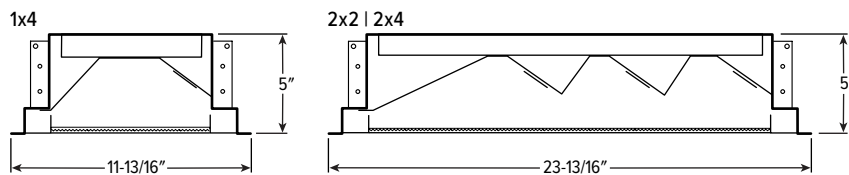


FIXTURE DETAILS

SYM

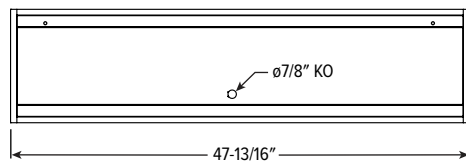


SYM/ASY



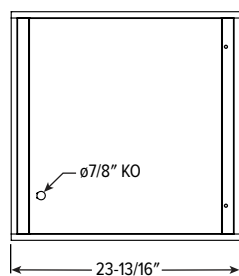
BACK VIEW DETAILS

1x4



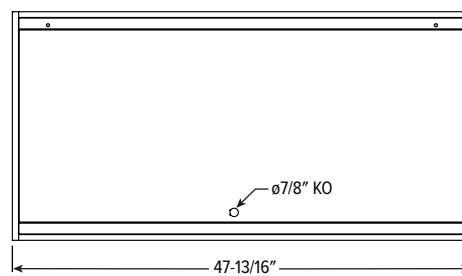
Recommended Ceiling Opening: 10-7/8" x 46-3/4"

2x2



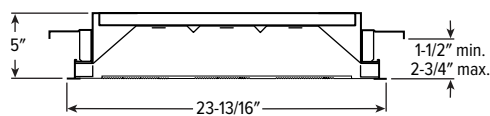
Recommended Ceiling Opening: 22-7/8" x 22-3/4"

2x4



Recommended Ceiling Opening: 22-7/8" x 46-3/4"

NEMA TYPE "F" INSTALLATION



For continuous row mounting, add 47-13/16" for each additional fixture to obtain ceiling opening. 3/4" between end plates.



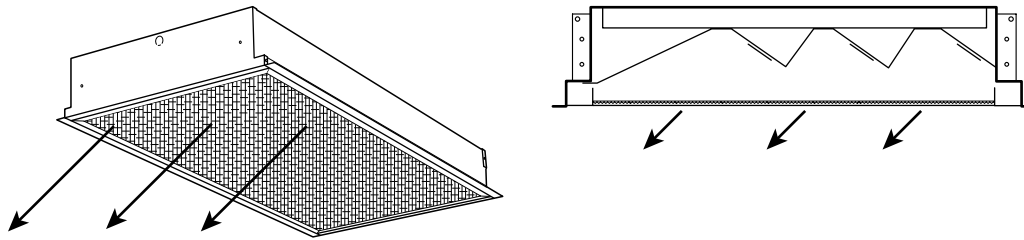
ADDITIONAL CONTROL OPTIONS

DIM, DIM1 and DRV only for MIL-STD-461G compliance

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V only)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

DIRECTIONAL LENS DETAILS

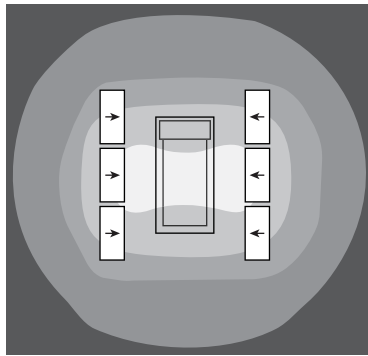


TYPICAL SURGICAL SUITE LAYOUT

625 sq. ft. | Ceiling/Mounting: 14'-0" AFF | Light Loss Factor: 0.90 LLF | Room Reflectance Values: 50/70/10 | Calculation Grids: 3'-0" AFF | Reference IESNA RP-29-20

Suite 1

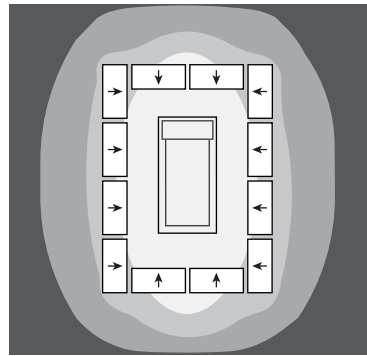
MST-24-L210/840-SYM/ASY



AVERAGE FOOTCANDLES			
ZONE 1	ZONE 2	ZONE 3	ZONE 4
400	300	200	100

Suite 2

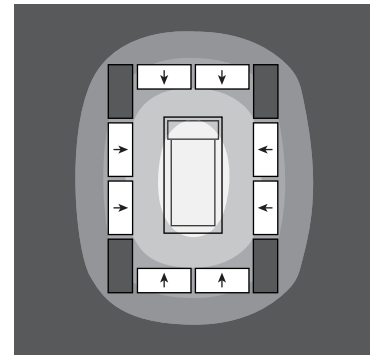
MST-24-L32/GRN/L121/840-SYM/ASY
White only



AVERAGE FOOTCANDLES		
ZONE 1	ZONE 2	ZONE 3
300	200	100

Suite 3

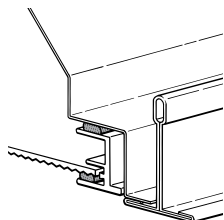
MST-24-L32/GRN/L121/840-SYM/ASY
Green only



AVERAGE FOOTCANDLES			
ZONE 1	ZONE 2	ZONE 3	ZONE 4
50	40	30	10

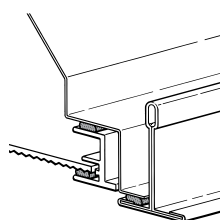
GASKETING DETAILS

DOUBLE GASKETING (STANDARD)



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens.

TRIPLE GASKETING (TG)



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens. Gasketing between bottom perimeter of unit (adjacent to T-bar or hardpan ceiling) is provided by factory and field-installed.

